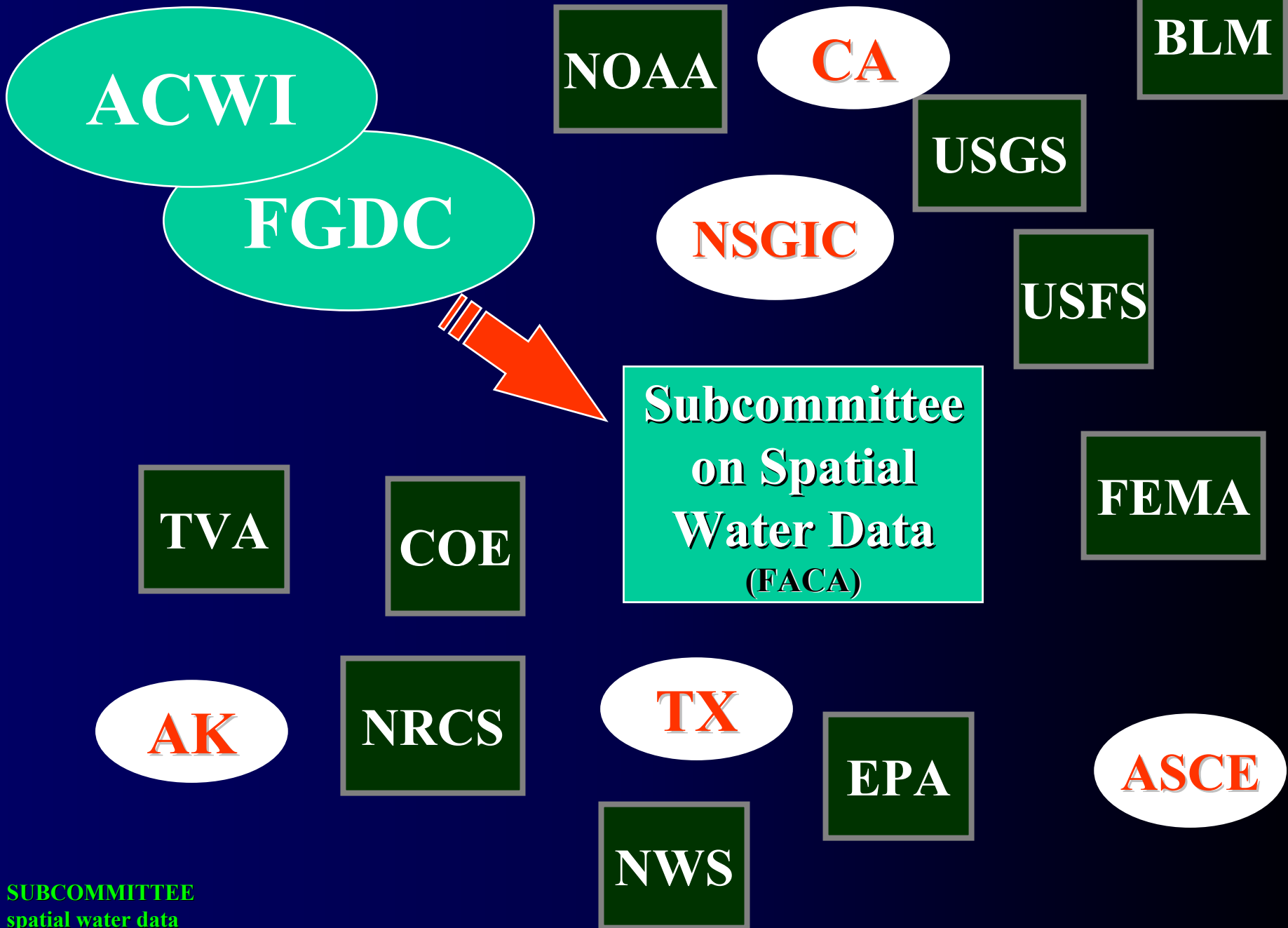


**E
M
A
P**

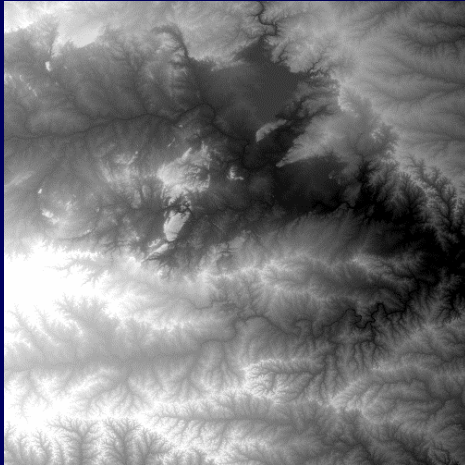
Symposium 2002

**Interagency
Development of the
National Watershed
Database
(WBD)**

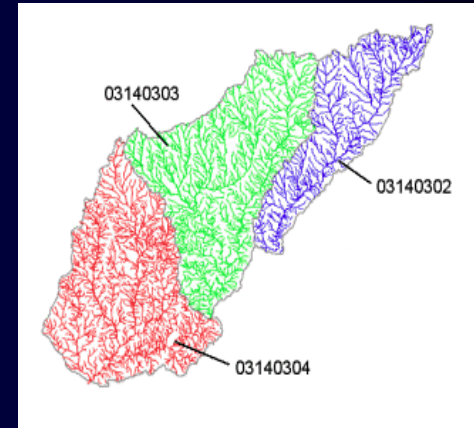


Integration of key Spatial Water Datasets

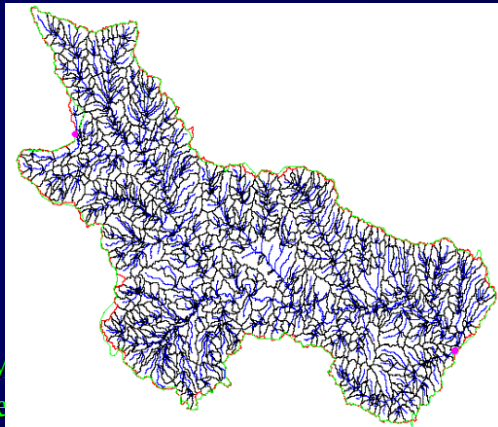
NED



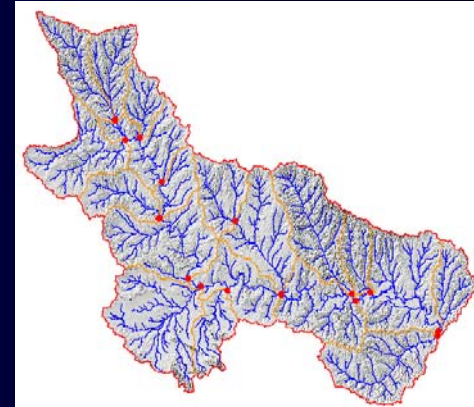
NHD



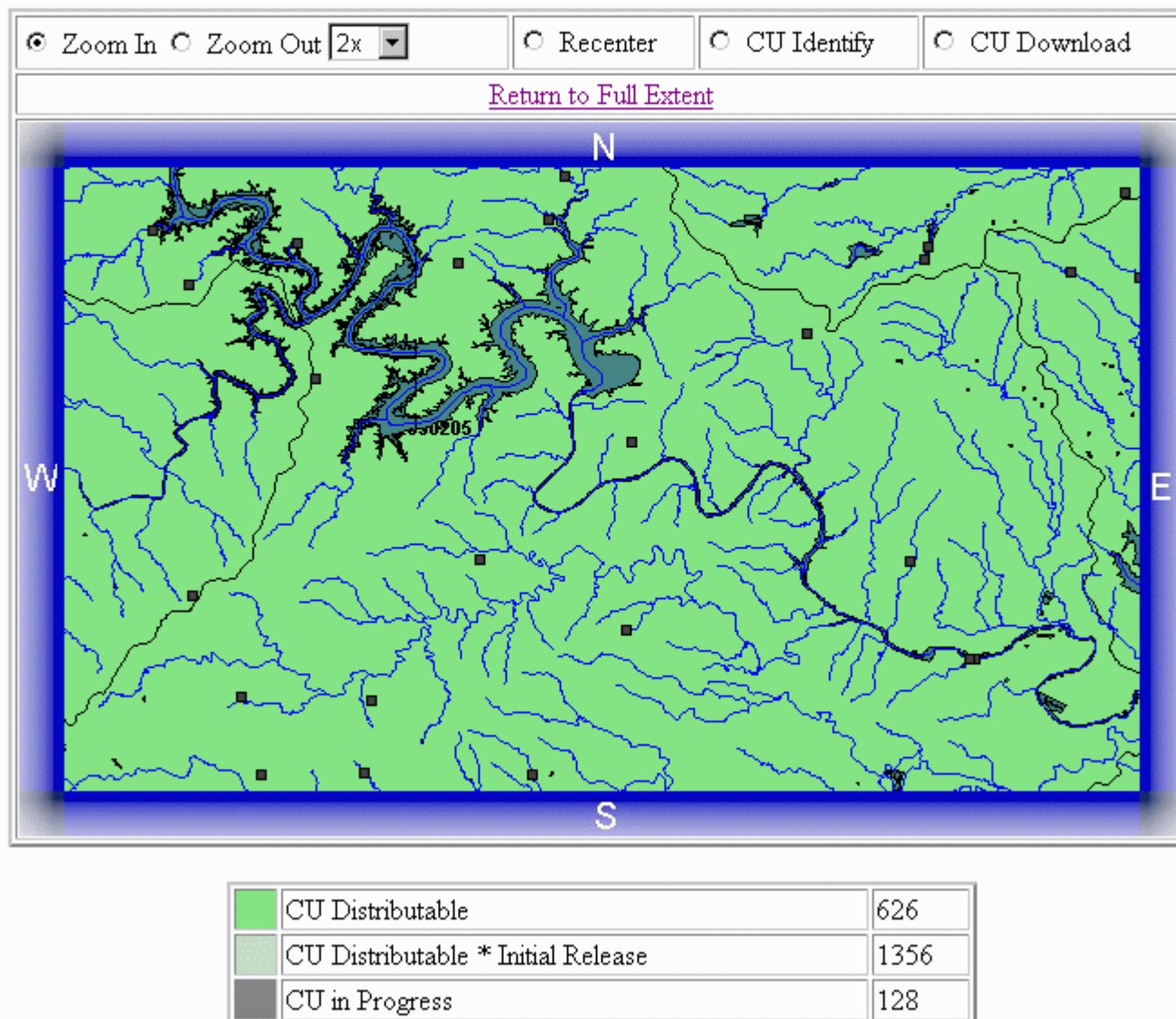
EDNA



WBD



Obtaining NHD Data



NED

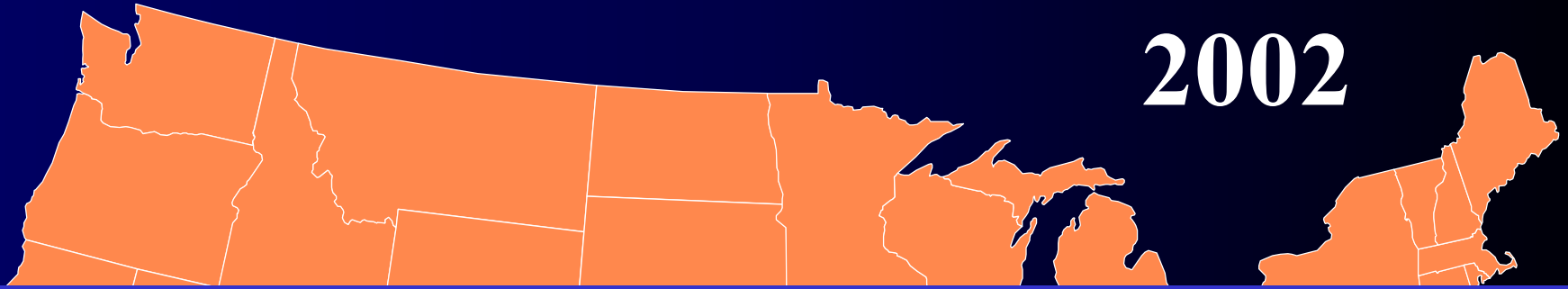
National Elevation Dataset



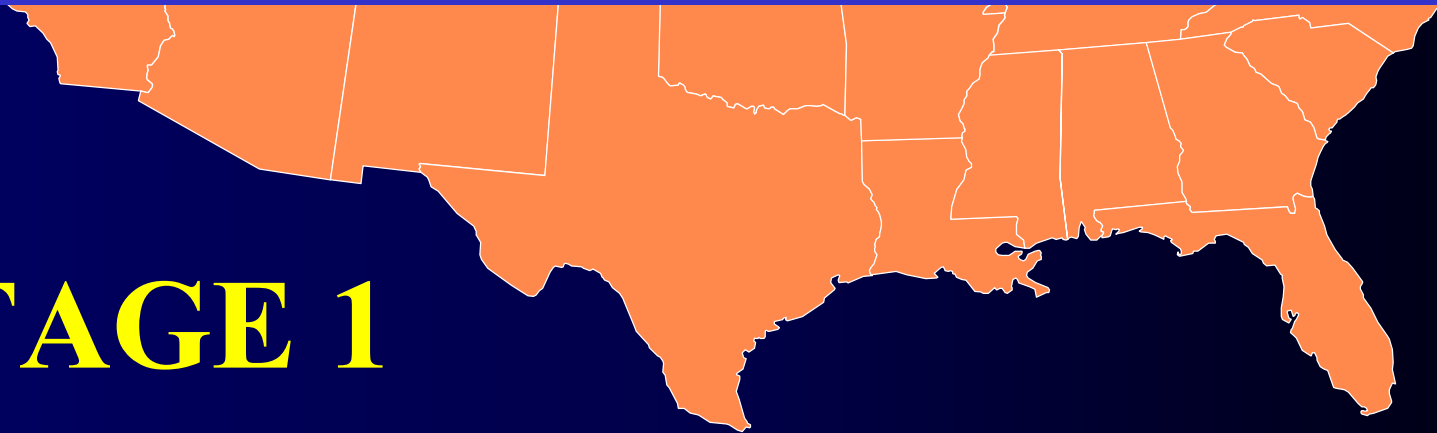
SUBCOMMITTEE
spatial water data

EDNA [alias NED-H]

2002



INITIAL PHASE COMPLETE FOR
CONTIGUOUS U.S.!!



STAGE 1

Hydrologic Units, 1973

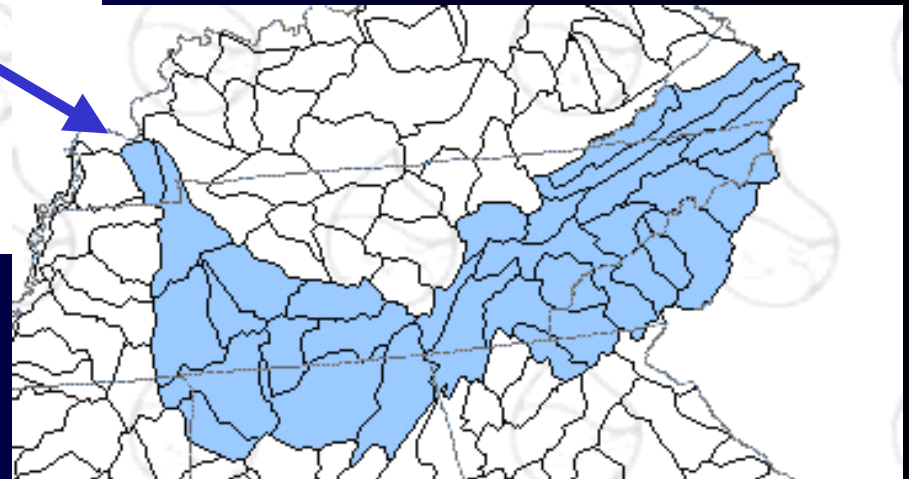
2-digit= 1st level = 22 regions

4-digit= 2nd level = 222 subregions

6-digit= 3rd level = 789 accounting

8-digit= 4th level = 2223 cataloging

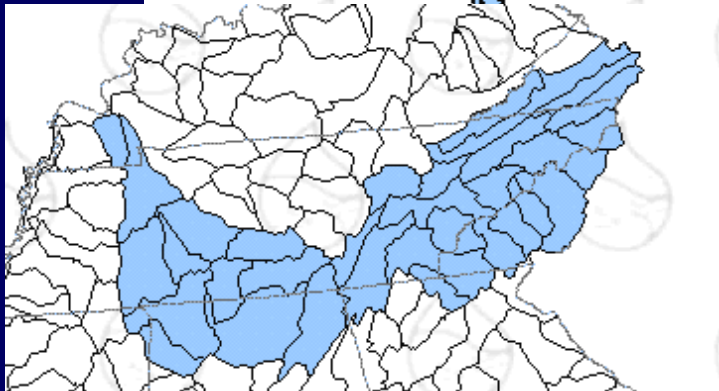
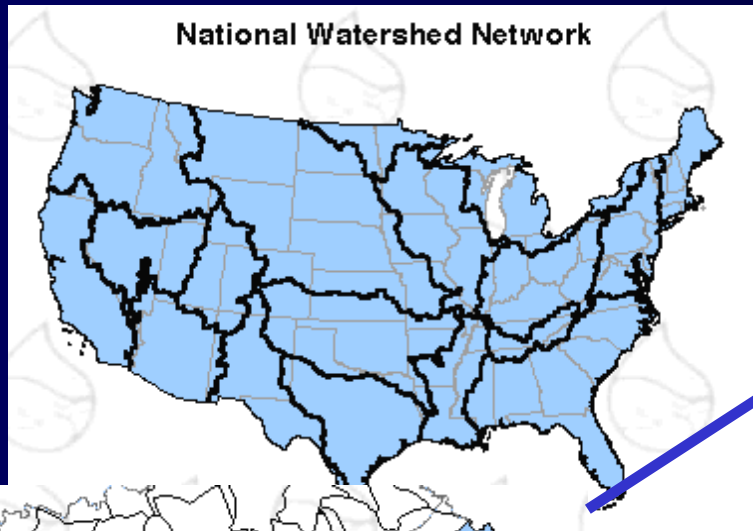
National Watershed Network



Watershed Boundaries Dataset (WBD): Why is it needed?

- 8-digit Cataloging Units too large
- uniform, widely accepted boundaries
- Need a standard nomenclature, ID's, names
- Speed up basin/drainage area delineation

Hydrologic Units



2-digit= 1st level = 22 regions

4-digit= 2nd level = 222 subregions

6-digit= 3rd level = 789 accounting

8-digit= 4th level = 2223 cataloging

new!

10-digit= 5th level = ~22,000 watersheds

12-digit= 6th level = ~160,000 subwatersheds

CO

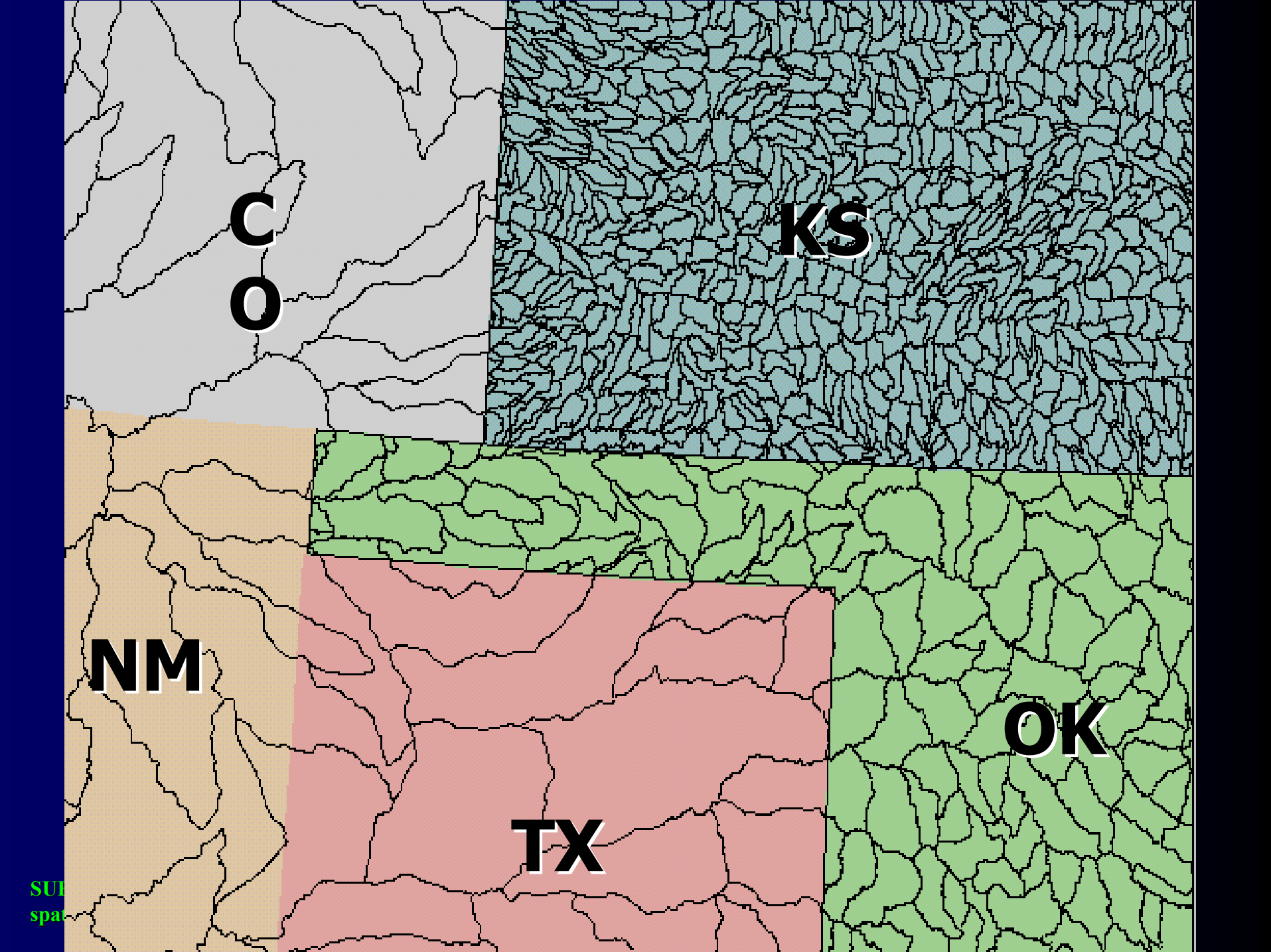
KS

NM

OK

TX

SUI
spa



HYDROLOGIC UNIT BOUNDARY
LAYER PROGRESS

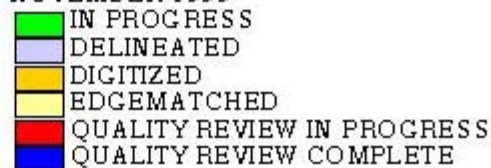


Initial “draft” completed December 2002

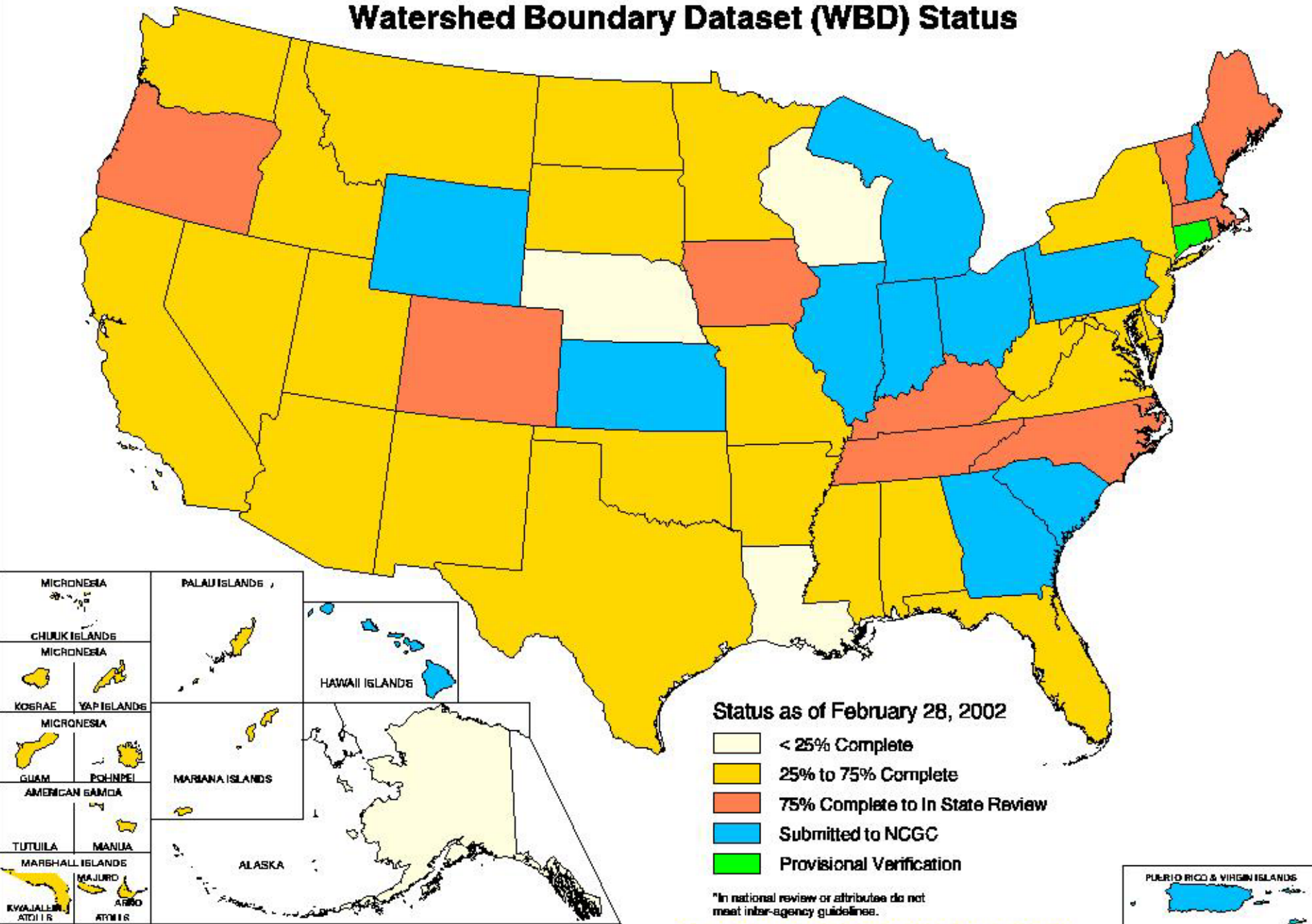
NOTE: Virgin Islands and Hawaii
data sets are being reviewed

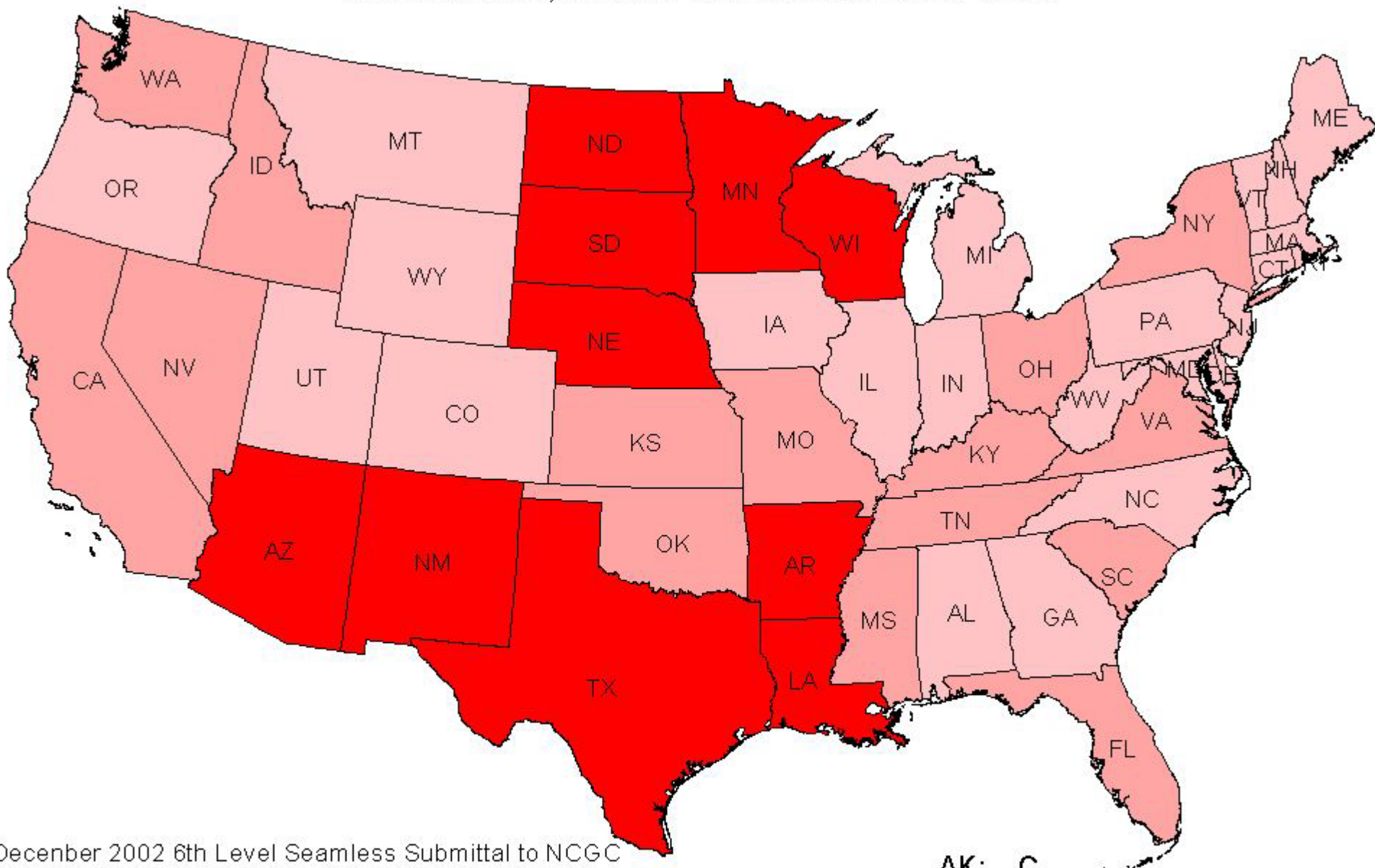
Project Status

NOVEMBER 1999



Watershed Boundary Dataset (WBD) Status

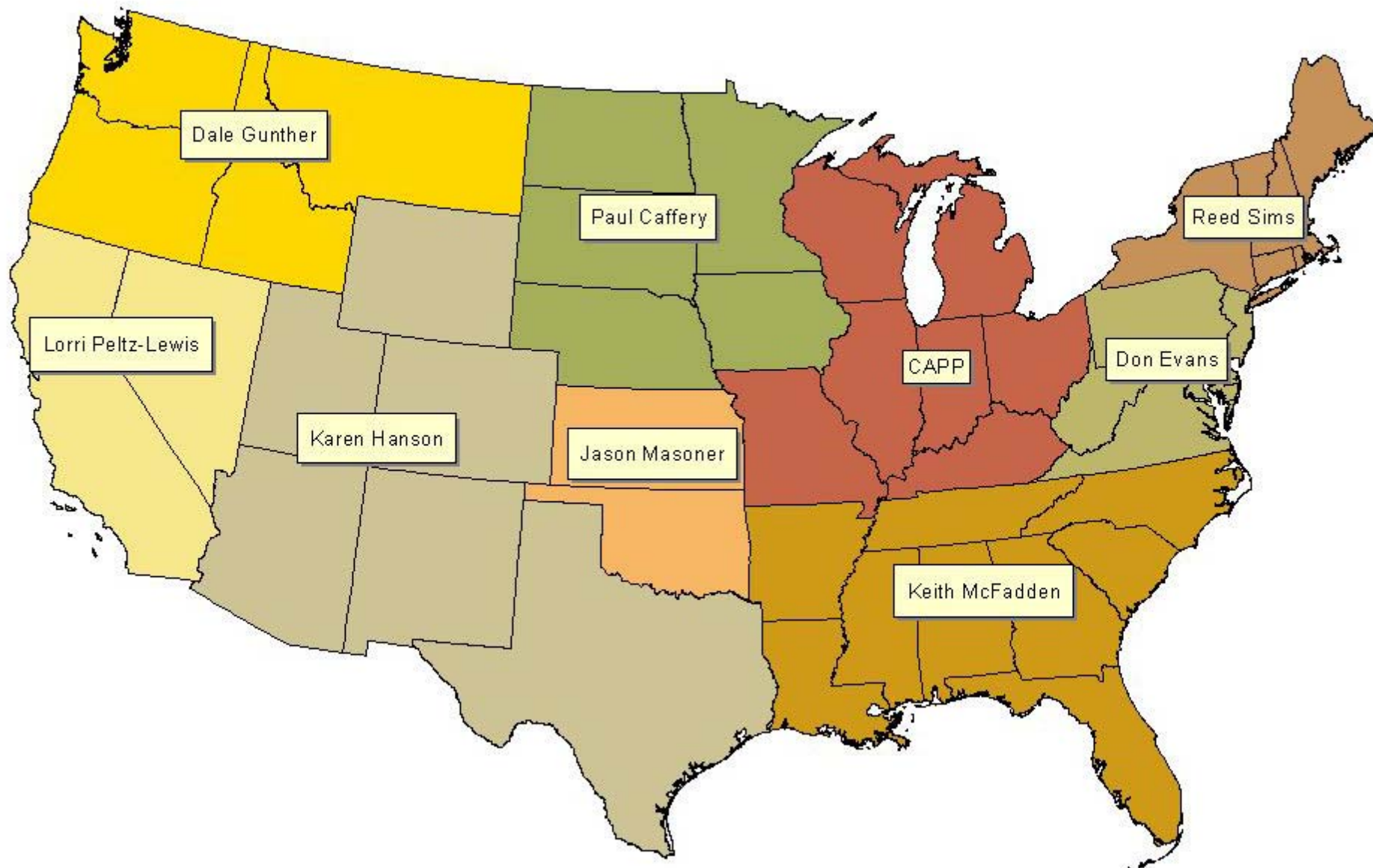




A Anticipated Completion to Current Standards
B Draft Submittal; May or May Not be to Current Standards
C No Seamless Draft Will be Available

AK: C
 PR: A
 PB: C
 USVI: A

**Preliminary State Coordination Regions
(as of April 30, 2002)**



Review

historically:

NRCS certification



currently:

Subcommittee review

Guidelines

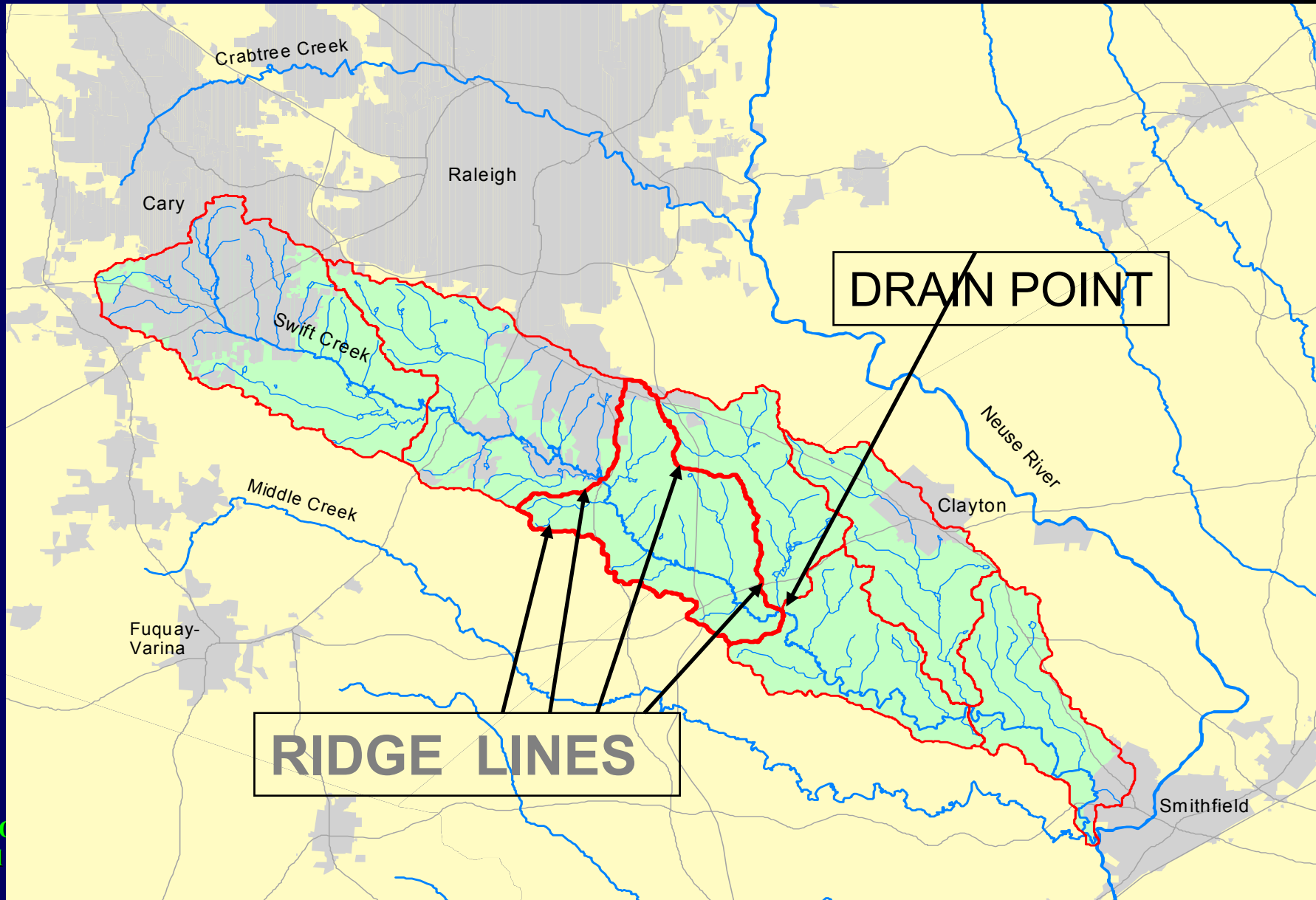
[Things to think about in delineating the next logical level down:]

- one unified federal “guideline”, accepted by all agencies
- Water flows to/through a **single point**
- **Acreage**
 - 5th level, 40,000-250,000 acres
 - 6th level, 10,000-40,000 acres
- Relatively **equal in size.**
- **~5-8 subdivisions** of previous level (nested levels)
- **Persistent**, modification of existing FIPS/ANSI standard to encompass “watersheds” & “subwatersheds”

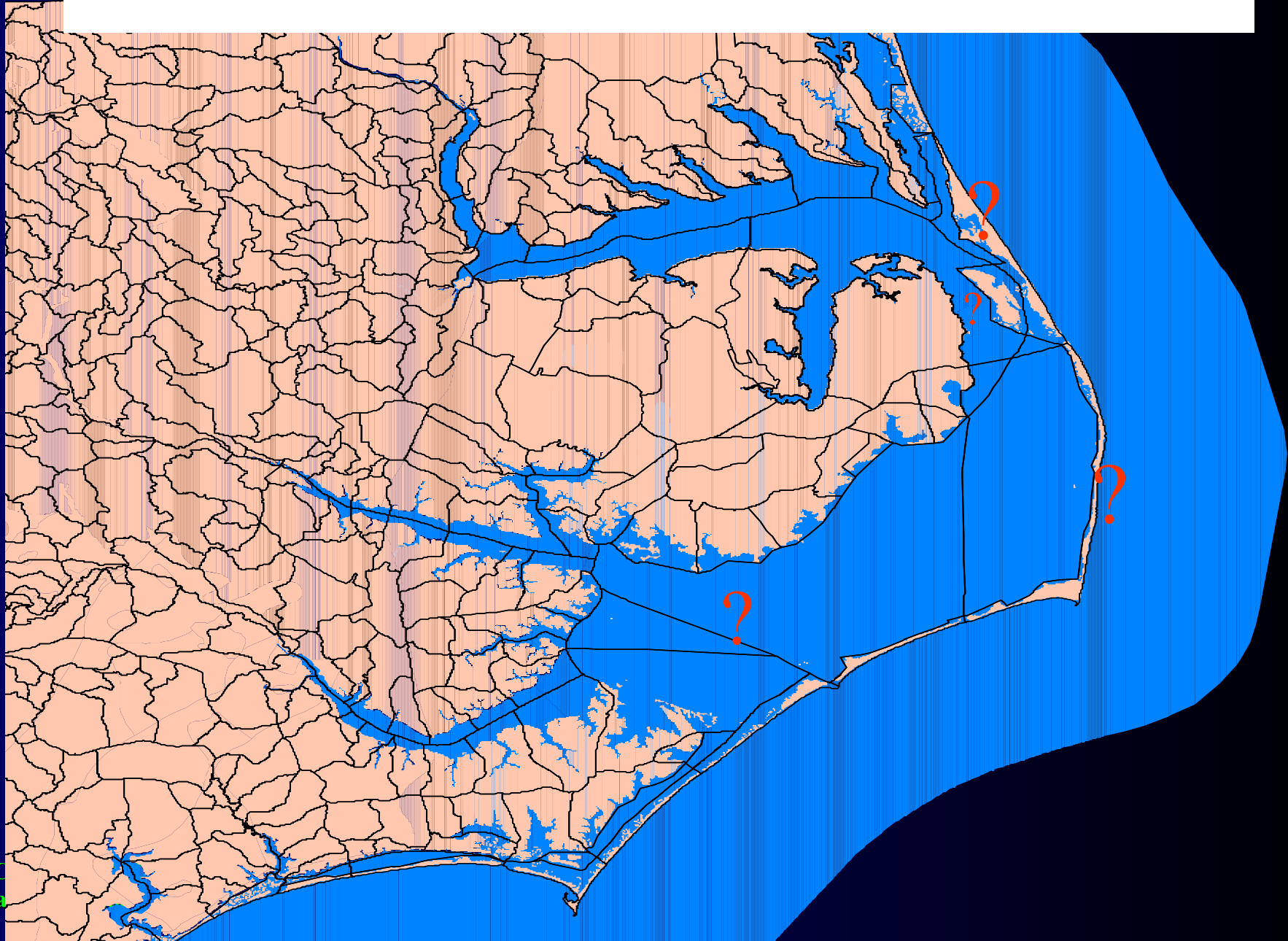
Unified guidelines:

- **names**
 - region, subregion, basin, subbasin, watershed, subwatershed
 - naming convention for watersheds/subwatersheds
- **numbering**
 - headwaters to mouth increasing by one
- **topographic flow**
 - natural flow vs man's perturbations (ditches, canals)
- **enhanced hydrologic attribution**
 - ability to move upstream /downstream, karst

Example of Mapping Criteria



PROBLEMS IN COASTAL AREAS



SUBC
spatial

**Subcommittee
on Spatial
Water Data**

```
graph TD; A[Subcommittee on Spatial Water Data] --> B[Coastal Watersheds Work Group]; A --> C[Guidelines Work Group]; B --> D[FGDC HUC Interagency Guideline]; C --> D;
```

**Coastal
Watersheds
Work Group**

**Guidelines
Work Group**

**FGDC
HUC Interagency
Guideline**

NOAA/NOS Implementation

- **Pilots**
- **Coastal delineation guidance**
- **state/coast implementation**
 - **Assisting state groups**
 - **Workshops**
 - **Data and data manipulation**
 - **One-on-one with States**

A map showing coastal delineation options. The land area is dark green, and the water area is light blue. A thick white line follows the coastline, with several thinner white lines branching off into the water. A thick red line follows the coastline, with several thinner red lines branching off into the water. The text "coastal delineation options" is written in a bold, serif font in the upper right corner.

coastal delineation options

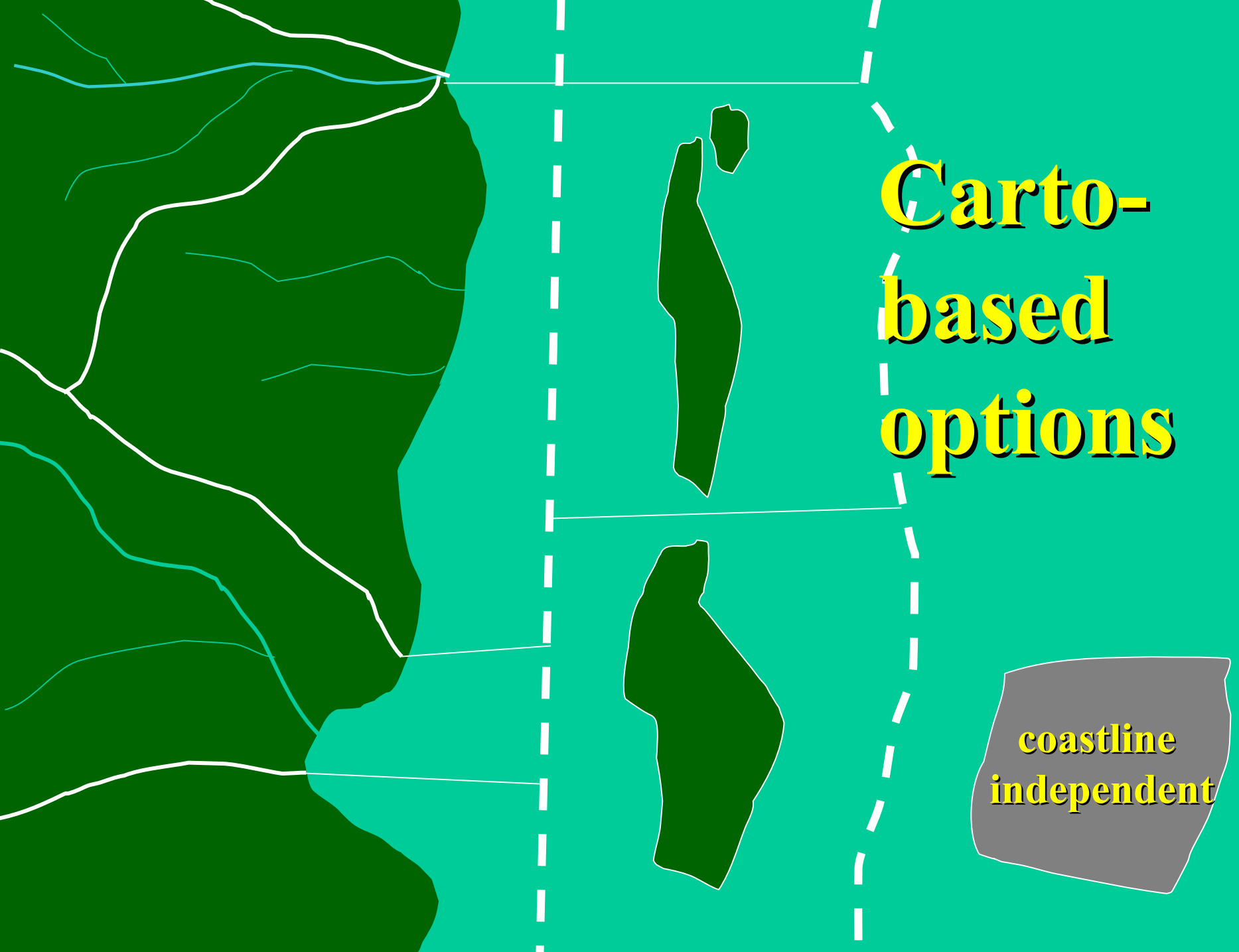


“land limited”

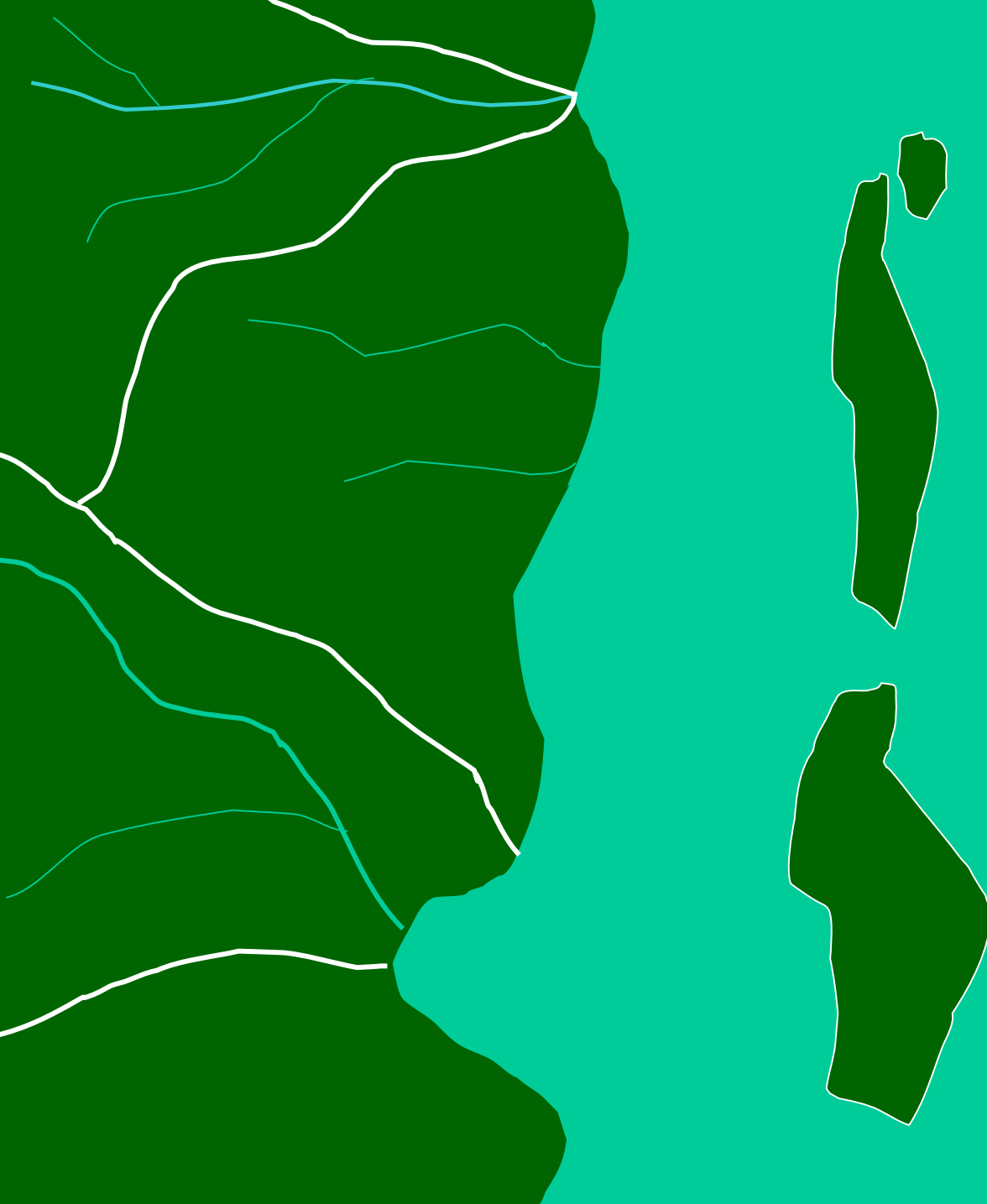
coastline
dependant

Carto- based options

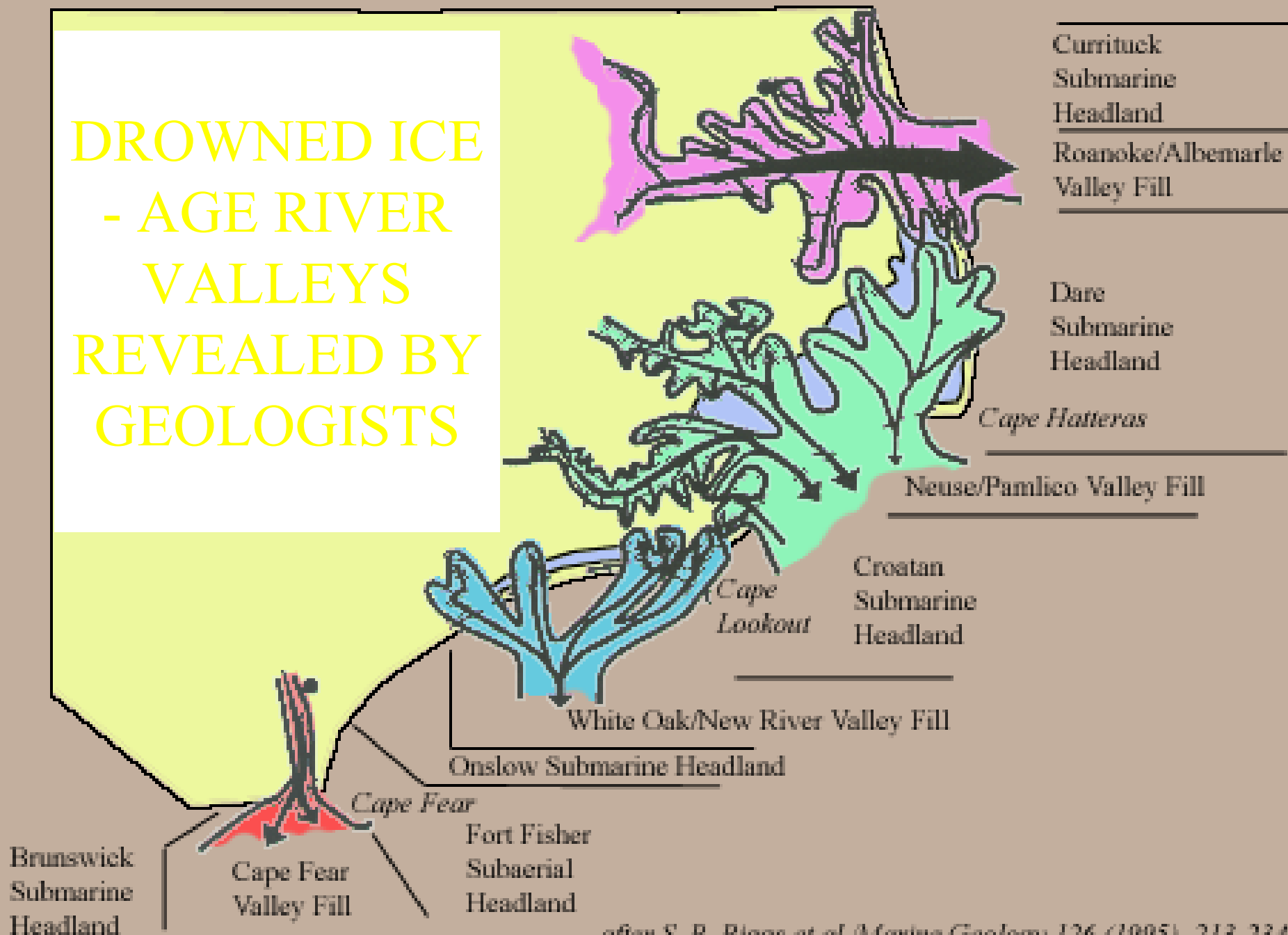
coastline
independent



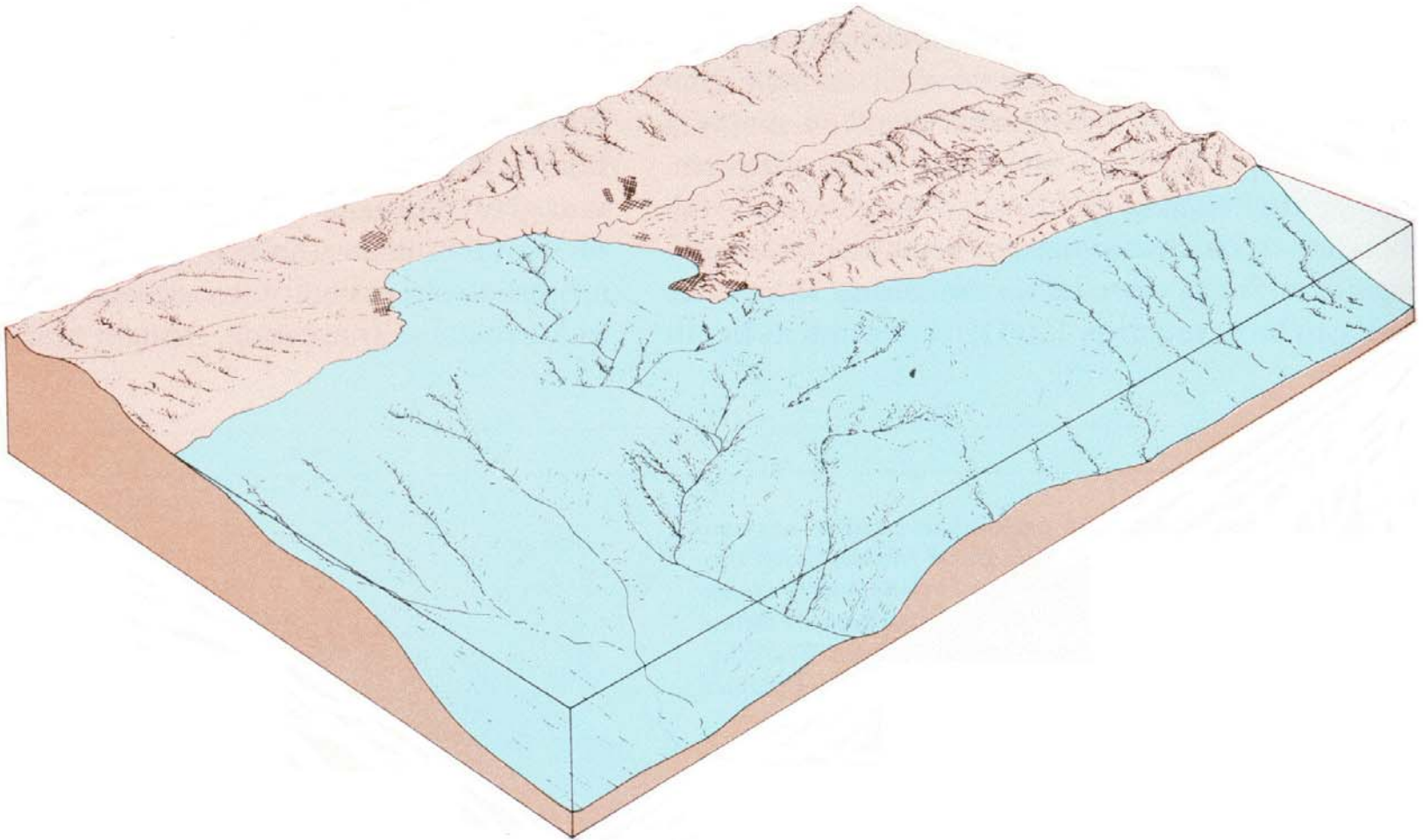
Geologic Process- Based options



DROWNED ICE - AGE RIVER VALLEYS REVEALED BY GEOLOGISTS



Geomorphology



Selected test areas:

- Louisiana delta
- Great Lakes
- California/Oregon hard coast
- Florida coast
- Narragansett “New England” coast

For additional information visit...

water.usgs.gov/wicp

www.fgdc.gov

Current “guidelines”

www.ftw.nrcs.usda.gov

the end